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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,450	02/27/2004	Jinichi Morimura	112857-474	9916

7590 03/30/2005

William E. Vaughan
Bell, Boyd & Lloyd LLC
P.O. Box 1135
Chicago, IL 60690-1135

EXAMINER	
ANYA, IGWE U	
ART UNIT	**PAPER NUMBER**
2891	

DATE MAILED: 03/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/790,450	MORIMURA ET AL.	
	Examiner	Art Unit	
	Igwe U. Anya	2891	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213. .

Disposition of Claims

4)☒ Claim(s) *16 and 17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *16 and 17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *7/30/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murohara (US Patent 6069402) in view of Jarvis (US Patent 5200601).

4. Murohara teaches method for manufacturing a semiconductor integrated circuit device comprising the steps of:

forming a plurality of circuit patterns on a substrate (3);

bonding a plurality of semiconductor integrated circuit chips (9) onto a first surface of the substrate having the circuit patterns formed thereon, and connecting

electrodes (8) of the semiconductor integrated circuit chips to each of the circuit patterns;

applying a first seal resin (1, 5) onto each of the semiconductor integrated circuit chips;

disposing a first reinforcement plate (16) above the first seal resin;

applying a second seal resin (1) onto a second reinforcement plate (17);

disposing the second reinforcement plate on a second surface of the substrate with the second seal resin there between (fig. 1);

pressurizing the first and second seal resins via the first and second reinforcement plates so as to let flow the first seal resin along a peripheral faces of each of the semiconductor integrated circuit chips (col. 3 lines 28 – 41);

hardening the seal resins flown along the peripheral faces of the semiconductor integrated circuit chips (col. 3 lines 41 – 66); and

thereafter dividing the substrate into a semiconductor integrated circuit device at every semiconductor integrated circuit chip (col. 4 line lines 3 – 8).

5. Murohara lacks a reinforcing plate of metal material (though other materials are suggested in col. 4 lines 16 – 19).

6. However, Jarvis teaches reinforcing plates (7A, 7b) of metal material (col. 2 lines 30 – 48) for good tensile strength.

7. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Jarvis into the Murohara reference to manufacture a flexible card.

8. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murohara (US Patent 6069402) in view of Jarvis (US Patent 5200601), and further in view of Arsenault (US Patent 5579117).

9. The Murohara/Jarvis reference teaches the features previously outlined, but lacks: disposing an individually divided semiconductor integrated circuit chip on a roll film and coating the same; heating a thin film on which the semiconductor integrated circuit chip is coated with the thin film; manufacturing a card connected plate in which a plurality of semiconductor integrated circuit chips are connected in line; and dividing the card connected plate into an individual semiconductor integrated circuit card.

10. However, Arsenault et al. teach:

disposing an individually divided semiconductor integrated circuit chip (10) on a roll film and coating the same (30);

heating (35) a thin film on which the semiconductor integrated circuit chip is coated with the thin film;

manufacturing a card connected plate in which a plurality of semiconductor integrated circuit chips are connected in line; and

dividing the card-connected plate into an individual (5) semiconductor integrated circuit card (col. 5 lines 39 – 55) for enhanced flexibility.

11. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Arsenault et al. into the Murohara/Jarvis reference to manufacture a flexible card.

Remarks

12. Prior art made of record and not relied upon, considered pertinent to applicant's disclosure include Hirai et al. (US Patent 6160526), Sato et al. (US Patent 5956601), and Uden (US Patent 4649418).

Contact Information

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Igwe U. Anya whose telephone number is (571) 272-1887. The examiner can normally be reached on M - F 8:30am - 5:00pm.

14. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William B. Baumeister can be reached on (571) 272-1722. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

15. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Igwe U. Anya
Examiner
Art Unit 2891

IA
March 25, 2005